

# Fix It Yourself with These Handy Hints for Motorists

*How to Keep Your Windshield Wiper Working, Build a Nest for Tools, Grind Valves an Easy Way, or Rig a Siphon*

**T**HE average windshield wiper goes bad long before it is worn out. Constant contact with the surface of the glass puts a kink in the rubber edge so that it will not bend back and forth to clean the glass as it should. Fig. 1, below, shows how to avoid this deterioration.

Take a small piece of sheet metal and bend it into a triangular shape. Then cut or file small notches in the upper edges. When the windshield wiper is not in use, the sheet metal piece is slipped over the wip-

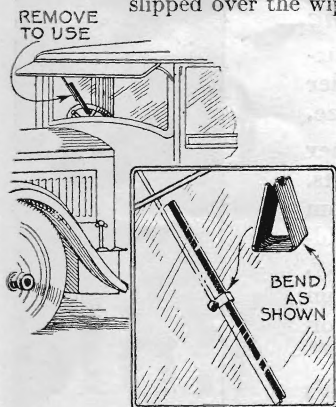


Fig. 1. Small metal guard stops warping of rubber windshield wiper.

er so that the hinge pin will rest in the notches and the rubber will be held away from contact with the glass. This will prevent the rubber from taking a permanent set.

## Convenient Tool Pockets

**T**HE coach type of auto body usually has the front seats so they can tip forward to give access to the rear seats.

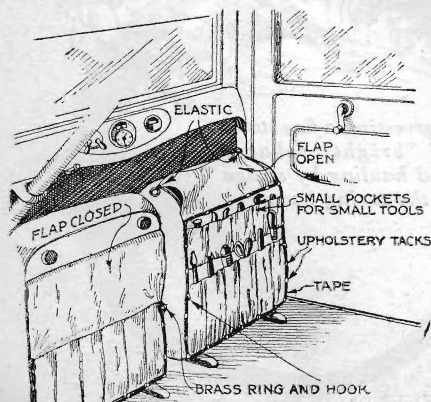


Fig. 2. Handy tool pockets can be rigged with canvas flaps under coach-body seats that tilt up.

Hinges support these seats at the front and feet are provided at the rear so that there is a space between the bottom of the seat and floor of the car. You can utilize this space for two handy tool pockets, as shown in Fig. 2. Each pocket should be fitted with a flap held tight either by rings and hooks or by snap fasteners. The arrangement of the tools and the number of pockets will be governed by the space available.

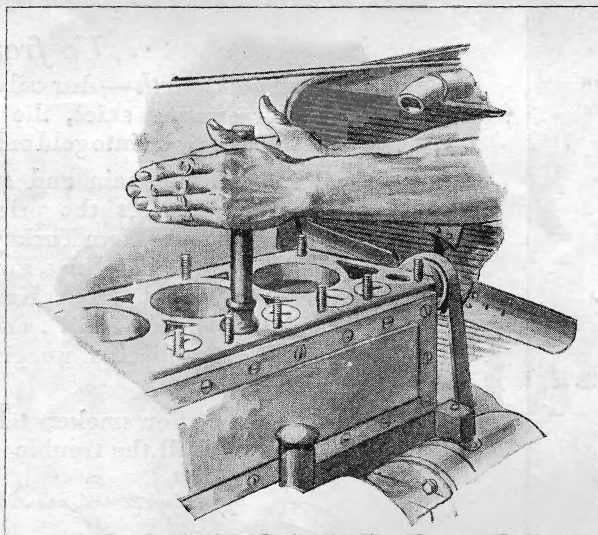


Fig. 3. Cut off a plumber's force cup to fit the valve head and you have a simple grinding device.

## Trick Valve-Grinding Tool

**A**N ORDINARY plumber's force cup, such as is used for clearing clogged drain pipes, can be fashioned into a useful valve-grinding tool. The lower part of the rubber cup is cut off so that the diameter of the remaining portion is smaller than the diameter of the head of the valve. Pressing the cup tightly against the valve will cause the rubber to adhere so the valve can be rotated and lifted from time to time, as shown in Fig. 3.

## Ten Dollars for an Idea!

R. L. Ogden, of Edgewater, Colo., wins this month's \$10 prize for his suggestion of a valve-grinding tool, as shown in Fig. 3. Each month POPULAR SCIENCE MONTHLY awards \$10, in addition to regular space rates, for the best idea sent in for motorists. Other contributions used are paid for at the usual rates.

## A Self-Starting Siphon

**I**NSTEAD of sucking rubber hose to start gasoline siphoning out of a tank, construct the neat siphon shown in Fig. 4. Bend a piece of brass or copper tubing into a U shape. To one end attach a rubber bulb like photographers use. To the other attach a piece of hose. Then drill a hole in the tube at the bend. Insert the rubber tube in the tank and squeeze the bulb. Press your finger tightly over the hole and release the bulb. Remove your finger and gasoline will flow from the hole in the pipe. The hole must be below the level of the gasoline in the tank.

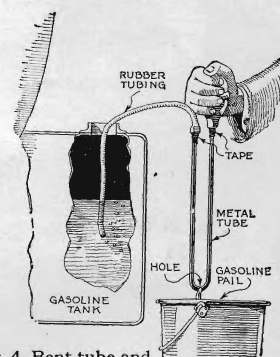


Fig. 4. Bent tube and bulb a handy siphon.

## Running-Board Tire Rack

**F**IGURE 5 shows a convenient and simple running-board tire holder that can be made from a block of wood, some strap iron, and five bolts. As shown, the arrangement is for a rim fitted with four lugs, but it will work with other numbers of lugs, if necessary. Make sure that the tire is held rigidly in place.

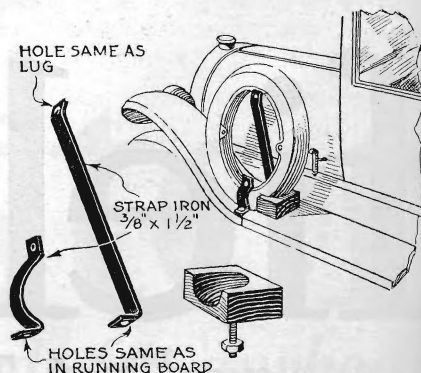


Fig. 5. A wooden block, strap iron, and five bolts compose this running-board tire holder.